

## **ABSTRACT OF THE DISCLOSURE**

The present invention relates to a diversity receiver and, more particularly, to a differential amplitude detection diversity receiver employing MRC and a method of receiving signals using the same, calculating the distances between the amplitude ratios of signals received at each antenna and each amplitude candidate value and multiplying the distances by the amplitudes of signals currently received at each antenna. The differential amplitude detection diversity receiver of the present invention comprises: a majority of decision variable calculating sections configured to compute amplitude decision variables by multiplying the distances between the amplitude ratios of signals received at each antenna and each amplitude candidate value by the amplitudes of signals currently received at each antenna; and amplitude decision section configured to compose the computed amplitude decision variables and to determine the amplitude of the received signal by selecting amplitude candidate value corresponding to certain composed amplitude decision variable from the composed amplitude decision variables.